

**Section 4 Summary & Certification****4.1 510(k) Summary of Safety and Effectiveness****4.1.1 Classification**

Electroencephalograph, 21 CFR 882.1400, Class II, 84GWQ, Neurology

**4.1.2 Device Name**

Proprietary: Olympic Medical Lectromed Cerebral Function Monitor System

Common Name: EEG Monitor

**4.1.3 Company**

Olympic Medical  
5900 First Ave. S.  
Seattle, WA 98108

**4.1.4 Contact**

Edward B. (Ted) Weiler, Ph.D.  
Vice President, Research and Development  
Phone (206) 268-5151; Fax (206) 762-4200

**4.1.5 Intended Use**

The Olympic Medical Lectromed Cerebral Function Monitor System is intended to monitor the state of the brain by acquisition of EEG signals in the intensive care unit, operating room, and for clinical research.

**4.1.6 Predicate Device**

- Olympic Medical Lectromed Cerebral Function Monitor (K983229).
- Devices Limited Cerebral Function Monitor 4640 in commercial distribution in the U. S. prior to May 28, 1976.
- Applied Medical Research Corporation Cerebral Function Monitor Model 870 (K791580)

**4.1.7 Device Description**

The Olympic Medical Lectromed Cerebral Function Monitor System consists of three modules. A header amplifier module is used to connect the patient electrode leads to a plug-in module that produces three outputs that may be monitored or recorded on a 2-channel strip-chart recorder. The three outputs are cerebral function (activity), impedance, and raw EEG.

#### **4.1.8 Safety and Standards**

The device meets the following safety standards:

- BS EN 60601-1-1
- BS EN 60601-1-2: 1993 Medical Electrical Equipment  
Part 1. General requirements for safety  
Section 1.2 Collateral Standard for EMC

#### **4.2 Class III certification**

Not applicable



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

Mr. Edward B. Weiler, Ph.D.  
Director of Special Projects  
Olympic Medical  
5900 First Avenue South  
Seattle, WA 98108

JUN 18 2002

Re: K020335

Trade/Device Name: Olympic Medical Lectromed Cerebral Function Monitor  
Regulation Number: 882.1400  
Regulation Name: Electroencephalograph  
Regulatory Class: II  
Product Code: GWQ  
Dated: May 10, 2002  
Received: May 13, 2002

Dear Mr. Weiler:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

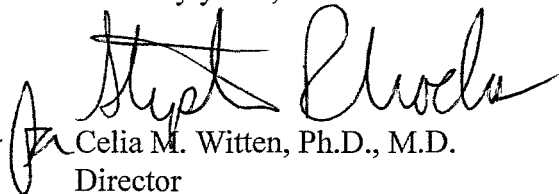
Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

Page 2 – Mr. Edward B. Weiler, Ph.D.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 21 CFR Part 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4659. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/dsma/dsmamain.html>

Sincerely yours,

A handwritten signature in black ink, appearing to read "Celia M. Witten", is written over a horizontal line.

Celia M. Witten, Ph.D., M.D.

Director

Division of General, Restorative  
and Neurological Devices

Office of Device Evaluation

Center for Devices and

Radiological Health

Enclosure

**Section 3 Indications for use**

510(k) NUMBER (IF KNOWN): K020335

DEVICE NAME: Olympic Medical Lectromed Cerebral Function Monitor System

**INDICATIONS FOR USE:**

The Olympic Medical Lectromed Cerebral Function Monitor System is intended to be used by a variety of clinicians to acquire and utilize EEG signals, when used in conjunction with other clinical data, in intensive care areas, Operating Room, Emergency Room, and clinical research lab:

- to monitor the state of the brain
- for determination of, and long-term monitoring of, the neurological status of patients that may have suffered an hypoxic-ischemic event.
- for monitoring of neurological status to assist in the clinical management and treatment of the patient by observing how the treatment affects the neurological status as shown by the CFM.
- to assist in the prediction of neurological outcome
- to monitor and record frequency and intensity of seizures to assist in management of anti-convulsive therapy.
- to assist in the prediction of severity of Hypoxic-Ischemic Encephalopathy and long-term outcome in infants who have suffered an hypoxic-ischemic event.

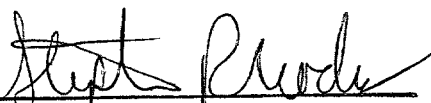
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Concurrence of CDRH, Office of Device Evaluation (ODE)

Prescription Use ☒ OR Over-the-Counter Use ☐

(Per 21 CFR 801.109)

(Optional Format 1-2-96)

  
(Division Sign-Off)  
Division of General, Restorative  
and Neurological Devices

510(k) Number K020335